

REMARKS

The Office Action dated October 29, 2003 has been received and carefully noted. The following remarks are submitted as a full and complete response thereto.

Claims 22-42 are pending in the current application, and are respectfully submitted for consideration.

Claims 22-33, 36, 37, 39, 40, and 41 were objected under 35 U.S.C. §103(a) as being unpatentable over *Vercauteren* (U.S. Patent No. 5,504,935) in view of *Fallgren* (European Patent Publication No. EP 0 504 122). Claims 34 and 35 were separately rejected under 35 U.S.C. §103(a) as being unpatentable over *Vercauteren* in view of *Fallgren*, and further in view of *Grube* (WO 95/24809). Claims 38 and 42 were separately rejected under 35 U.S.C. §103(a) as being unpatentable over *Vercauteren* and *Fallgren* and further in view of *Karmi* (U.S. Patent No. 5,884,157).

In making these rejections, the Office Action took the position that *Vercauteren* disclosed all of the elements of the claimed invention, with the exception of the specific step of detecting a service request received from the network side. *Fallgren* is cited as curing this deficiency in *Vercauteren*, with respect to the independent claims. *Grube* and *Karmi* are cited as curing deficiencies in some of the dependent claims. As will be discussed below, however, Applicant respectfully submits that each of the presently pending claims recites subject matter which is neither disclosed nor suggested in the cited prior art.

Independent claim 22, upon which claims 23 – 38 are dependent, recites a method of interworking between different radio access networks comprising a radio transceiver device capable of operating with a first radio access network and a second radio access network being attached to the first radio access network. The method comprises the steps of detecting a service request, wherein the service request is received from the network side. Information is accessed on conditions where the first and second radio access networks for giving sufficient support for a service requested by the service request. It is then analyzed whether or not the first radio access network and the second radio access network meets the conditions. A handover of the radio transceiver device is initiated from the first radio access network to the second radio access network if the second radio access network meets the conditions but the first radio access network does not.

Claim 39, upon which claims 40 – 42 are dependent, is directed to a network interworking device for a telecommunication network comprising at least two radio access networks. A radio transceiver device is capable of operating with the first radio access network and the second radio access network is attached to the first radio access network. The device comprises a detecting means for detecting a service request, wherein the service request is received from the network side. An analyzing means is responsive to the detecting means, and has the functionality of accessing information on conditions for the first and second radio access networks for giving sufficient support for the service requested by the service request. The analyzing means also analyzes whether or not the first radio access network and the second radio access network meet the

conditions. Initiating means are responsive to the analyzing means, with the initiating means being adapted to initiate a handover of the radio transceiver device from the first radio access network to the second radio access network if the respective conditions are not met by the first radio access network but by the second radio access network.

According to the present invention, independent networks operated by different operators can effectively handover or hand off between each other. The effective handover between independent networks which is provided by the present invention provides significant additional flexibility with respect to mobile stations. Applicant respectfully submits that the cited prior art fails to disclose or suggest the elements of the claimed invention, and therefore fails to provide the critical and unobvious advantages which were discussed above.

Vercauteren discloses a mobile communication network having path selection means for selecting a communication path. In particular, *Vercauteren* discloses a mobile communication network MCN which has communication paths between a mobile terminal MT and a fixed telecommunication network FTN. The communication paths within this single network can be different; there may be a direct coverage mobile radio network (DCMRN) for high-power terminals, and also indirect coverage mobile radio network (INCRN) for low-power terminals, as illustrated in Figure 1, and discussed in column 8, of *Vercauteren*. IMCRN is disclosed as being splittable into two separate radio active networks, those being a terrestrial radio access network and a satellite radio access network. Although *Vercauteren* discusses different types of communication paths

and refers to them as “networks,” *Vercauteren* describes only one single network MCN, with the other links merely being paths within the single network. The path selection of *Vercauteren* is therefore solely directed to selecting an appropriate communication path. *Vercauteren* also discusses that a handover decision is discussed only with respect to handover within the one single network. However, the present invention relates to handover between completely independent networks, and allows the use of different services within the separate networks. *Vercauteren*, again, is only directed to handover within a single network.

The Office Action refers to column 10, line 6 through column 11, line 20 of *Vercauteren* as disclosing a method for performing a handover in a manner which is similar to the present invention. However, applicant respectfully submits that this is an inaccurate characterization of *Vercauteren*. This passage of *Vercauteren* is clearly directed to handover between two base stations in a single network; for example, the detailed discussion in *Vercauteren* discusses handovers between relay stations RS1-6 and fixed base stations FBS1-3; this is illustrated, for example, in Figure 2 of *Vercauteren*. *Vercauteren* is not at all directed to the problem of handover between different networks. Therefore, *Vercauteren* cannot disclose or suggest a radio transceiver device capable of operating with a first radio access network and a second radio access network attached to the first radio access network, with a method which includes the steps of detecting a service request received from the network side, accessing information, analyzing, or initiating a handover, as recited in presently pending claims 22-38. Similarly, there can

be no disclosure nor suggestion in *Vercauteren* of the radio transceiver device, detecting means, and analyzing means as recited in claims 39-42.

Fallgren appears to be cited as disclosing a step and a means for detecting a service request from the network side. Applicants respectfully submit, however, that *Fallgren* does not disclose or suggest any such step, and that *Fallgren* cannot be combined with *Vercauteren* to disclose or suggest the claimed invention. *Fallgren* discloses a neighbor-assisted handoff in a cellular communication system; *Fallgren*, like *Vercauteren*, therefore, is directed to handoff between base stations in a single independent network. No combination of *Vercauteren* and *Fallgren*, with or without the tertiary references of *Grube* and *Karmi*, can be interpreted as disclosing or suggesting a method of interworking between different radio access networks, or a network interworking device, which performs the same steps or has the same elements as the presently pending claims. Neither reference, nor a combination of the two references, can be interpreted as disclosing or suggesting a step or apparatus which detects a service request received from a network side. Similarly, there is no disclosure or suggestion of a step or device for accessing information on conditions of the first and second radio access network, for giving support for a service requested by the service request. Due to the fact that both of these references are directed to handover between a same network, there is no disclosure or suggestion of, and no need for, such information. Similarly, there is no disclosure or suggestion of a step or device which analyzes whether or not the first radio access network and the second radio access network meet the conditions, and similarly no

disclosure or suggestion of a step or device which initiates a handover of a radio transceiver device from the first radio access network to the second radio access network if the second radio access network meets the conditions but the first radio access network does not.

Applicants respectfully submit that a handover between two networks, such as a handover between UMTS and GSM, require consideration of numerous elements which are neither disclosed or suggested in *Vercauteren*. For example, a multimode terminal would be required for such a handover, but would not be required for a handover of the type which is disclosed in *Vercauteren*. The presently pending claims are directed to, among other things, a radio transceiver device which is capable of operating with a first radio access network and a second radio access network. The present specification discusses the aspects of various embodiments of the present invention which must be considered, and various of these elements form the basis of the distinguishing features which are currently recited in the claims. It is respectfully submitted, therefore, that any rejection of the presently pending claims based upon *Vercauteren* and *Fallgren* is improper. With respect to the other rejections over combinations of *Vercauteren*, *Fallgren*, and *Grube* or *Karmi*, applicant respectfully submits that the arguments discussed above also apply to the dependent claims. *Grube* and *Karmi* fail to cure the significant deficiencies which exist in *Vercauteren* and *Fallgren*. *Grube* discloses a method for providing alternate communication services based upon geographic location. In *Grube*, it is determined whether a particular service requested is prohibited in a

predefined area. If so, an alternative service is made available to the requesting user identity (See Figure 2 of *Grube*). If there is not availability of any such alternative service, an error message is issued as illustrated in Figure 210. However, there is no disclosure nor suggestion in *Grube* of a handover being automatically preformed. A person skilled in the art, therefore, would not be able to determine how to yield the claimed invention based upon a combination of *Vercauteren*, *Fallgren* and *Grube*.

Karmi discloses that a check is performed in order to determine whether a particular user is entitled to use a particular service. However, there is no disclosure nor suggestion in *Karmi* when viewed alone, or *Karmi* when combined with *Vercauteren* or *Fallgren* of how to perform a handover between 2 different networks in case a service is not available in one of the networks. Therefore, a person with ordinary skill in the art would not be able to yield the claimed invention based upon a combination of *Vercauteren*, *Fallgren* and *Karmi*.

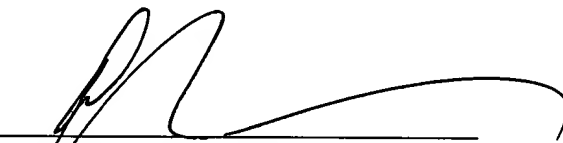
As discussed above, applicant respectfully submits that each of presently pending claims 22-42 recites subject matter which is neither disclosed nor suggested in the cited prior art. Applicant submits that this subject matter is more than sufficient to render the claimed invention unobvious to a person of ordinary skill in the art. It is therefore respectfully requested that each of claims 22-42 be found allowable, and this application passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by

telephone, the applicant's undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicant respectfully petitions for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



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